


Create these files either in a text edit application or through a scripting application. Then open the file from terminal and input the function to test out.

 Input into a file


```
mystery0 [] = 0
mystery0 (a:x) = 1 + mystery0 x
```

```
mystery1 xs = [y|x <- xs, y <- [x,x]]
```

```
mystery2 f [] = []
mystery2 f (a:x) = f a : mystery2 f x
```

```
mystery3 item [] = []
mystery3 item (x:y) | item==x = mystery3 item y
                    | otherwise = x : mystery3 item y
```

```
merge [] ys = ys
merge (x:ys) xs = x:merge ys xs
```

 Input into terminal

```
*Main> mystery0 [2,3]
2
*Main> mystery0 [2,3,4,5,6,7,8]
7
*Main> |
```

```
*Main> mystery1 [2,3,4,5,6,7,8]
[2,2,3,3,4,4,5,5,6,6,7,7,8,8]
*Main> mystery1 [2,3]
[2,2,3,3]
*Main> |
```

```
*Main> mystery2 (+2)[2,4,5]
[4,6,7]
*Main> |
```

```
*Main> mystery3 (2)[2,4,5]
[4,5]
*Main> mystery3 (3)[2,4,5]
[2,4,5]
*Main> mystery3 (3)[2,4,5,6,7,8]
[2,4,5,6,7,8]
*Main> mystery3 (2)[2,4,5,6,7,8]
[4,5,6,7,8]
*Main> |
```

```
*Main> merge[7,8][2,3,4]
[7,8,2,3,4]
*Main> |
```